The results are, however, in contrast with the observation[2] that a raised fluoride concentration in drinking water or supplementary fluoride intake increases the fluoride content of milk in lactating women; in this study the fluoride content of human milk was increased by about 15-40% of daily supplements of 5 mg sodium fluoride. Though the dose of daily supplements employed was higher (5 mg) than the 1·5 mg used by Dr Ekstrand and others, the results of this study contradict their conclusion that fluoride is not transferred from plasma to breast milk. Therefore further studies employing higher (more than 1-1·5 mg/day) dosages of sodium fluoride need to be undertaken to see if transfer of fluoride from plasma to breast milk is a dose-dependent phenomenon. Such studies will also simulate the natural conditions under which the newborn children are breast-fed in regions where water is very rich in fluoride.

Dr Ekstrand and his colleagues have reported that fluoride does not bind to any constituent of breast milk. But there is evidence[3] that fluoride in milk is not totally diffusible as it is bound to fat, the albumin-globulin fraction, and casein, which contains a quarter of the total fluoride in whole milk. This discrepancy in the observations also needs evaluation.

KAMAL DEV MOUDGIL

Department of Biochemistry,
All-India Institute of Medical Sciences,
New Delhi 110 029,
India

[1] Suttie JW, Miller RF, Phillips PH. *J Nutr.* 1957;**63**: 211-24.
[2] Held HR. *Praxis* 1955;**44**:875-88.
[3] Ericsson Y. *Acta odont scand* 1958;**16**:51-77.

Skin necrosis after heparin injection

SIR,—We read with interest the report of Dr A M Jackson and Mr A V Pollock (24 October, p 1087) on skin necrosis following heparin injection and their suggestion that the injection preservative might be responsible. We have observed a similar reaction to subcutaneous heparin in which the preservative was clearly exonerated.

A 65-year-old hypertensive woman had been taking 160 mg propranolol daily for two years when she was admitted to Lewisham Hospital having suffered an extensive anterior myocardial infarction. Heparin (made by Boots Co, Nottingham, and containing ovine heparin and 0·5% phenol), 5000 units, was subsequently begun. Six days later the injection sites were red and tender. Over the next two days the central part of one indurated area of skin became necrotic. The heparin was discontinued but the other, more recent, injection sites also became necrotic. Injection of 500 units of porcine heparin without preservative produced severe erythema and central purpura, but an injection of 1 ml 0·5% phenol had no effect. Biopsy of the heparin injection site showed oedema. An injection of calcium heparin 50 units (Leo Laboratories) without preservative produced a similar skin reaction. The site of the heparin test injection was infiltrated with 5 ml 1% lignocaine and 50 mg hydrocortisone and did not undergo necrosis.

Two weeks after admission the patient developed a left-sided pleuritic pain and effusion and swelling of the left calf. On the assumption that she had a pulmonary embolus full anticoagulation with warfarin was begun. She was discharged from hospital with the abdominal wall ulcers healing but died after another myocardial infarction at home a month later.

Skin sensitivity to heparin is quite rare but if not recognised early can progress, as in this patient, to a disfiguring necrosis.

As Dr Jackson and Mr Pollock postulate, this is probably an Arthus-type vasculitis, as evidenced by deposition of complement and immunoglobulin in the vessels, and indeed was clinically recognised as such in our patient by one of us (DV). Such reactions to heparin might be avoided if nurses were instructed to withhold heparin if any visible or palpable swelling of a previous injection site is present. If injection sites do become indurated then injection of hydrocortisone may prevent progression to necrosis.

In this patient at least, the sensitivity was clearly to heparin alone and not to the preservative contained in the injection. Furthermore, there seemed to be no species-specific sensitivity to possible ovine or porcine protein contaminants.

PETER ISAACS

Guy's Hospital,
London SE1 9RT

D VOLLUM
T M L PRICE

Lewisham Hospital,
London SE13 6LH

Effect of programme on sexually transmitted diseases on clinic attendances

SIR,—Professor M W Adler's contribution (21 November, p 1395) has reminded me of the dire effects a previous television programme had on an "innocent" department of sexually transmitted diseases. A *Burke's Special*, devoted to venereal diseases, was transmitted during the evening of Friday, 3 August 1973, the most inappropriate timing. On the following Monday 102 new patients attended the clinics in Glasgow, 79 males and 23 females, some of whom claimed they had not slept because of worry. The programme did not cause any patient with early syphilis or gonorrhoea to attend earlier than they would have done otherwise.

An attempt was made to assess the effect of the programme on attendances. In Glasgow the number of new patients attending in August always exceeds that for July, so a comparison was made of the percentage increases in attendances between these two months in 1972 and 1973.

The problem in August 1973 was to be able to devote sufficient time to reassure and convince those without any evidence of infection that they really did not have a disease, and at the same time manage properly those extra numbers of patients who required treatment. The majority of the extra males had a mild urethritis, often made worse by self-examination, while most of the females had thrush. I suppose the programme did do some good to a few patients, but it was at a cost to the majority.

Attendances at department of sexually transmitted diseases in August 1972 and 1973:

		Percentage increases over July	
		1972	1973
Gonorrhoea	Males	6	16
	Females	2	5
Other sexually transmitted diseases	Males	25	75
	Females	13	26
Nothing abnormal found	Males	25	99
	Females	21	96

C B S SCHOFIELD

Newcastle General Hospital,
Newcastle upon Tyne NE4 6BE

Consultants and their future

SIR,—We would like to draw to the attention of the profession recent developments in the North Western Region in relation to the proposed expansion of the consultant grade in obstetrics and gynaecology. Consultant posts are being offered which involve a completely new style of working pattern. These new consultant posts are being offered along with a reduction of posts in the training grade. In one case it has been suggested that two consultant posts be offered in one hospital and it has been clearly stated that the appointees will work on an on-call rota with the one remaining registrar, the other registrar now in post being withdrawn from that hospital. This implies that the consultant will be resident when on duty in a one-in-three rota. We wonder what would happen to the patients under the clinical care of that consultant following his sleepless night on duty. It has been suggested that such consultants should be free of duty the following day—in which case what happens to the principle of continuity of care, which is a fundamental part of the present consultant contract and without doubt is in the best interests of the patient?

Although this is proposed as a pilot scheme, we are concerned about the outcome for the appointees should this scheme prove to be unsuccessful. In addition, we feel that once such posts have been established they will become the norm for consultant posts in the future. Junior staff at present clamouring for a rapid expansion in the consultant grade should carefully consider the implications for their own future, particularly in the case of the acute specialties.

IAN W MAHADY

Burnley General Hospital,
Burnley, Lancs BB10 2PQ

G A MOREWOOD

Wythenshawe Hospital,
Manchester M23 9LT

D S SHARP

North Manchester General Hospital,
Manchester M8 6RB

SIR,—Whatever the merits or demerits of the system of two grades of consultants in Scotland (see my earlier letter, 14 November, p 1332), all these consultants are very well trained. Now it seems that yet another grade is suggested, the "Short" consultant—short on training and experience.

It is appalling that while the Short Report advocates a better service for the patients it proposes that the postgraduate training period for consultants should be cut in half. This is rather like suggesting that the solution to the shortage of surgical beds is to put two patients in each bed. This proposal to cut the training period should be given the widest possible publicity.

For my own specialty of otorhinolaryngology, I am quite sure that a three-to-four-year training period would be inadequate. To reach the point when one may reasonably be allowed to carry out complicated middle ear or head and neck surgery without supervision, the